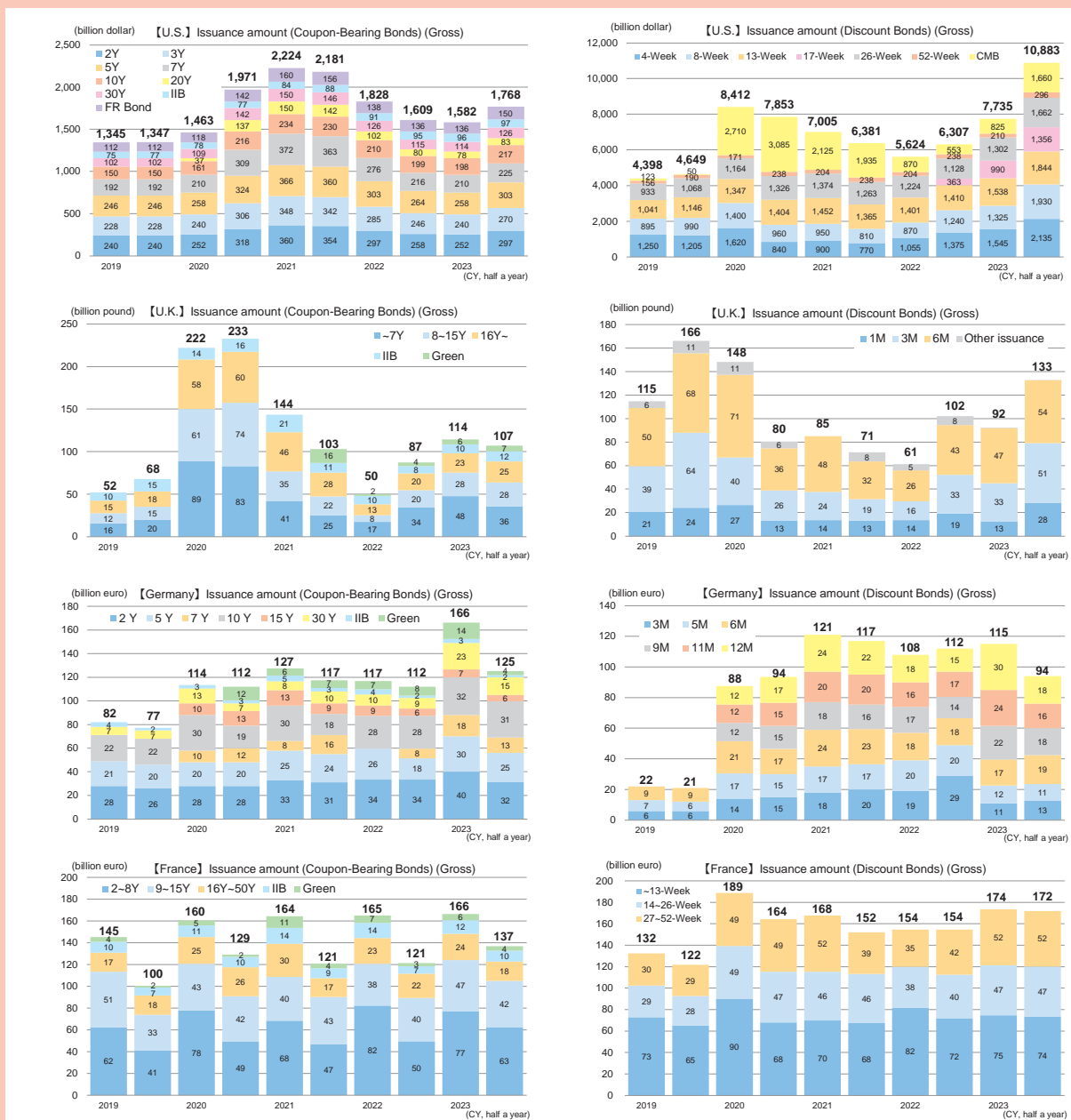


## 2 Debt Management Status in Foreign Countries

### (1) Government Bond Issuance Trends

As the spread of the novel coronavirus (COVID-19) had exerted huge impacts on the world economy since 2020, foreign countries came up with economic assistance, etc. Subsequently, they had been forced to raise more funds by changing government bond issuance plans and increasing government bond issuances substantially in 2020. Since 2021, government bond issuances returned to the levels before the spread of COVID-19, thanks to the economic and fiscal policy normalization, etc. However, government bond issuances have been increasing again recently (Fig. 2-45).

Fig. 2-45 Issuance Amount of Coupon-Bearing Bonds and Discount Bonds



Note 1: As of December 2023.

Note 2: Data for the U.K. Coupon-Bearing Bonds are calculated on a revenue basis while data for the others are calculated on a nominal value basis.

Note 3: "Other issuance" of issuance amount of discount bonds for the U.K. refers to discount bonds issued bilaterally between the DMO and eligible financial institutions, etc. on request from them.

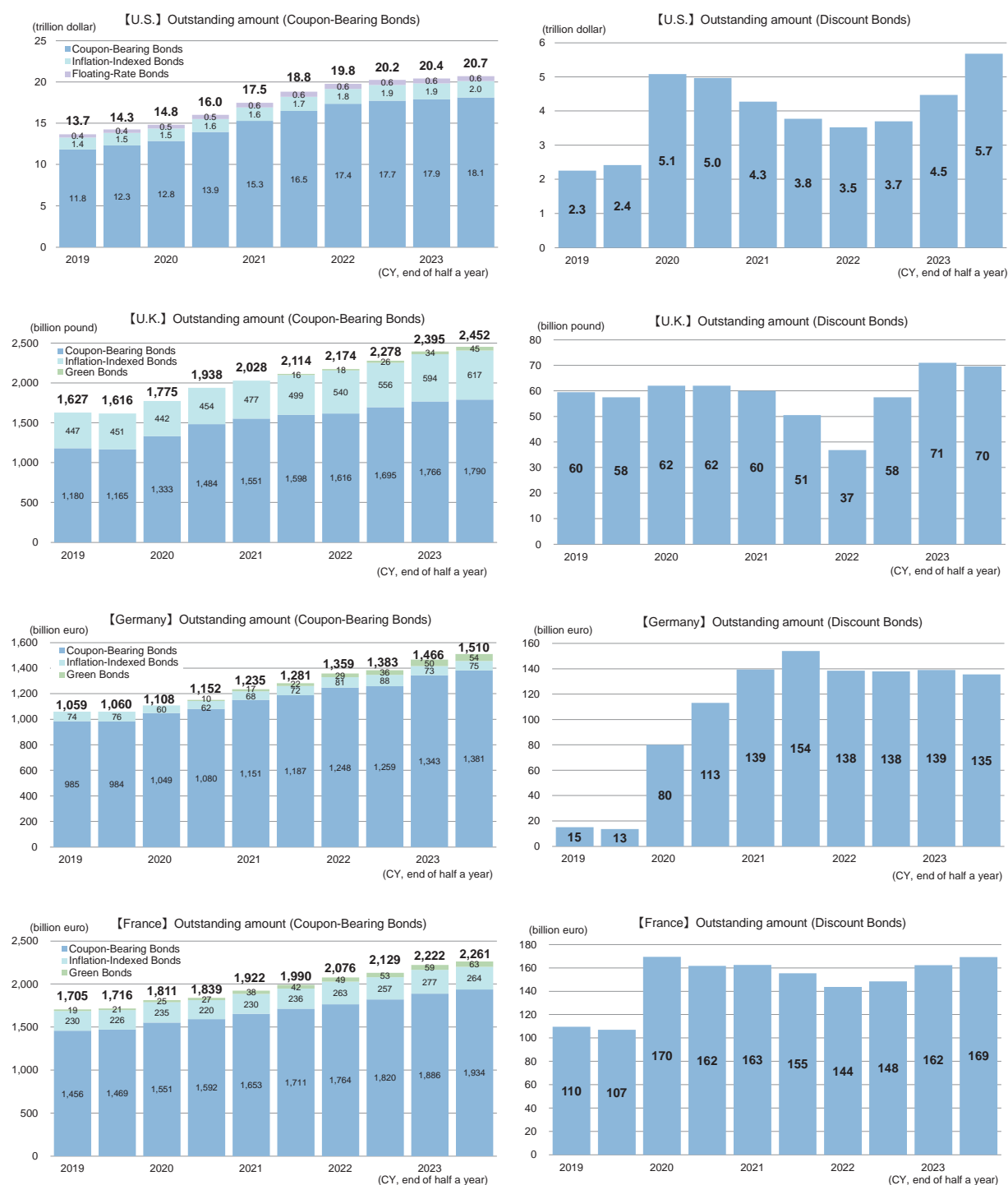
Note 4: Inflation-indexed green bonds of France are classified as "Green."

Note 5: "IIB" is inflation-indexed bonds. "FR Bond" is floating-rate bonds.

(Source) Calculated by the Ministry of Finance based on the data of relevant countries' debt management authorities, etc. on auction date basis.

Coupon-bearing bond issuances in foreign countries in 2023 indicate that 5-year or shorter issuances accounted for some 50-60% of the total issuances in the U.S. and Germany while longer issuances accounted for around 70% of the total in the U.K. and France. The maturity mix thus varies from country to country.

Fig. 2-46 Outstanding Amount of Coupon-Bearing Bonds and Discount Bonds



Note 1: As of December 2023.

Note 2: All data are calculated on a nominal value basis.

Note 3: "Coupon-Bearing Bonds" for these graphs are over 1-year bonds, excluding inflation-indexed bonds, floating-rate bonds and green bonds.

Note 4: Inflation-indexed green bonds of France are classified as "Green Bonds."

(Source) Calculated by the Ministry of Finance based on the data of relevant countries' debt management authorities, etc.

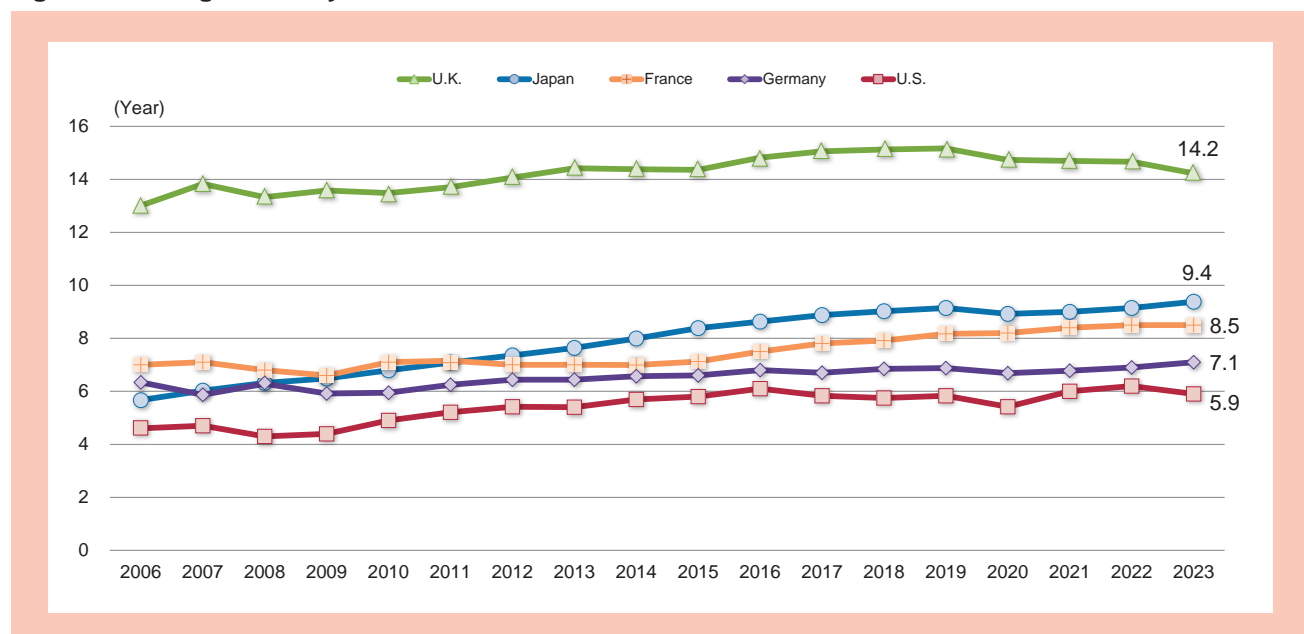
In Japan, the issuance amount of Inflation-Indexed Bonds may be adjusted in a flexible manner in response to the market environment, etc., based on discussions with market participants. In foreign countries, inflation-indexed bonds are issued as necessary. Particularly in the U.K. and France, inflation-indexed bond issuances account for some 10% of the total coupon-bearing bond issuance amount, making inflation-indexed bonds a relatively large share of financing.

## (2) Average Maturity

The “stock-based average maturity” is viewed as an important benchmark for assessing refunding risks. The stock-based average maturity is an indicator of overall outstanding government bonds, computed by weighted-averaging remaining maturities for outstanding government bonds.

Comparison between stock-based average maturities for government bonds in selected countries indicates that the average stands at as high as about 14 years in the U.K. with super long-term issuances accounting for a large share of all government bonds, the averages range from 5 to 9 years in the U.S., Germany and France. In Japan, the average bottomed out at 4.9 years at the end of FY2003 and continued to lengthen after that, reaching 9.2 years at the end of FY2019. Although the Japanese average fell back to 8.9 years at the end of FY2020 as Japan increased mainly short- to medium-term bond issuances due to the spread of COVID-19 in FY2020, the average extended to 9.4 years at the end of FY2023 due to the reduction in short-term issuances (Fig. 2-47).

Fig. 2-47 Average Maturity



Note 1: Data for Japan represent the average weighted maturity of outstanding General Bonds including Treasury Bills and excluding Financing Bills. Data for other countries include short-term (one-year and shorter) bills.

Note 2: Data are calculated on a stock basis. Non-marketable bonds are excluded.

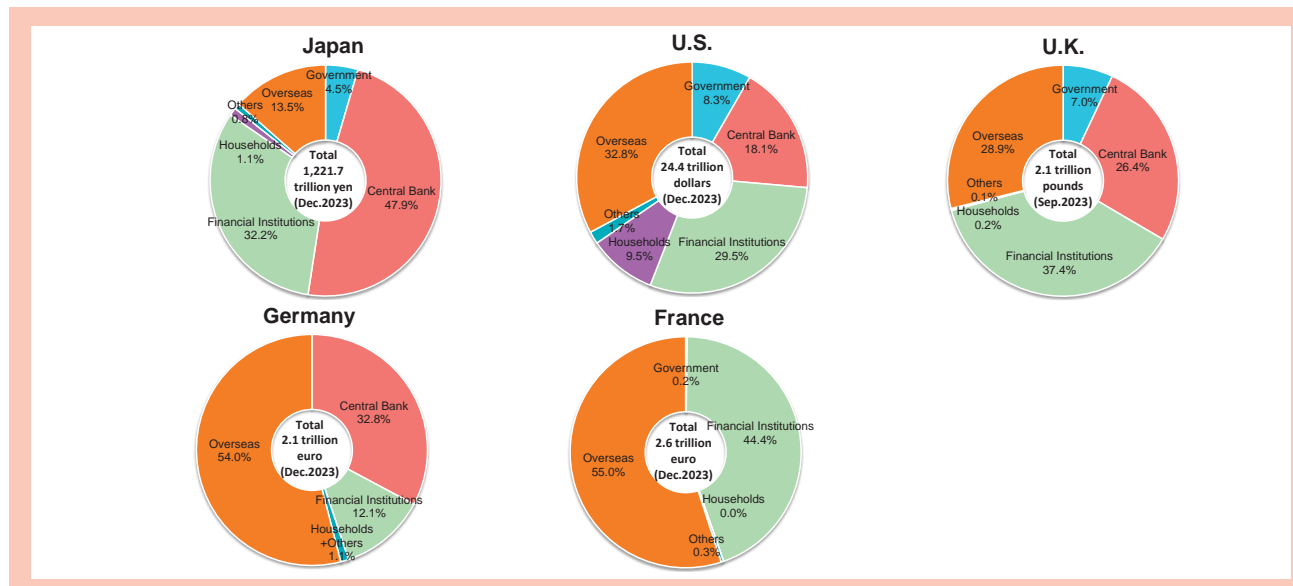
Note 3: Data for each year are as of March next year for Japan alone and as of December for other countries.

(Sources) OECD, Relevant countries' debt management authorities

### (3) Breakdown by Government Bond Holders

According to a breakdown of government bonds by holder category published in each country, the foreign ownership of JGB is on an upward trend and it was around 14% at the end of December 2023. On the other hand, the foreign ownership of government bonds is higher in foreign countries, standing at around 30% in the U.S. and the U.K., and around 50% in Germany and France (Fig. 2-48).

Fig. 2-48 Breakdown of Government Bonds by Holder Category



Note: Data for Japan include Fiscal Investment and Loan Program Bonds, Treasury Discount Bills (T-Bills) and JGBs for Retail Investors.

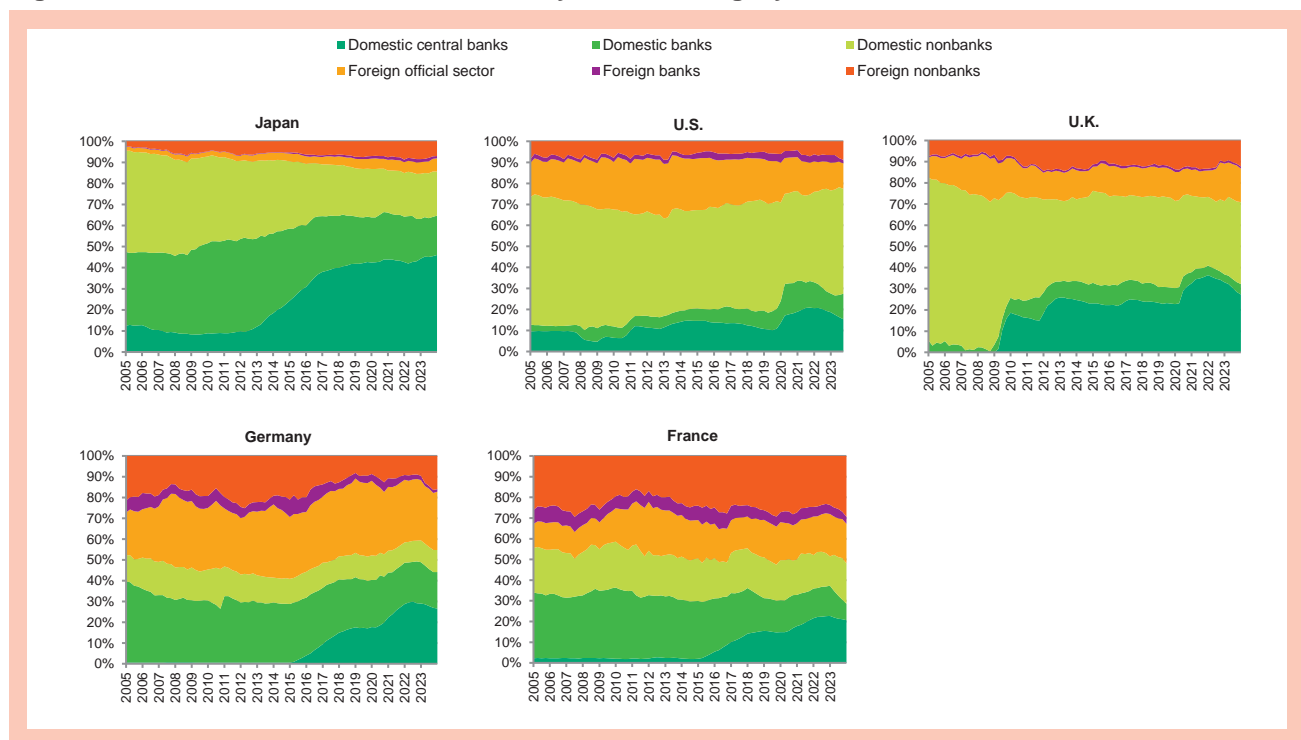
Data for the U.S. and the U.K. exclude bonds for retail investors (savings bonds).

In Germany and France, the total covers municipal bonds (the government's amount in Germany and the central bank's amount in France are not made available).

(Sources) Japan: Bank of Japan, U.S.: Board of Governors of the Federal Reserve System, U.K.: Office for National Statistics, UK Debt Management Office, Bank of England, Germany: Deutsche Bundesbank, France: Banque de France

Among other data, a working paper of the International Monetary Fund (IMF) in 2012 analyzed the estimated breakdown of government debt holdings based on data from debt management authorities, the Bank for International Settlements (BIS), and other sources. Specifically, the study divided government debt holders into six sectors (domestic central banks, domestic banks, domestic nonbanks, foreign official sector, foreign banks, and foreign nonbanks) and estimated their respective shares of government bond holdings (Fig. 2-49). The estimated breakdown has been updated and published on the IMF website quarterly.

Fig. 2-49 Breakdown of Government Debt by Holder Category



Note 1: As of December 2023.

Note 2: Domestic banks are depository corporations residing in the country (IFS definition). Foreign banks are BIS reporting banks residing outside the country. Foreign official sector includes foreign central bank holdings as foreign exchange reserves, SMP holdings of foreign central banks, and foreign official loans. Foreign nonbanks and domestic nonbanks include financial institutions other than central banks and banks (insurance companies, pension funds, and investment funds), as well as households and non-financial corporations. Foreign nonbanks and domestic nonbanks are imputed from external and total debt.

(Source) Serkan Arslanalp and Takahiro Tsuda (2012) "Tracking Global Demand for Advanced Economy Sovereign Debt", IMF Working Paper WP/12/284

### 3 Collaboration and Cooperation with Foreign Countries

Debt management authorities can exchange information through international conferences sponsored by international organizations. These conferences include the OECD (Organization for Economic Co-operation and Development) Working Party on Public Debt Management, the OECD Global Forum on Public Debt Management, the IMF Public Debt Management Forum, the World Bank Government Borrowers Forum, and the ADB (Asian Development Bank) Regional Public Debt Management Forum.

We have proactively attended these international conferences, giving presentations on Japan's debt management policies and sharing information on debt management policies with foreign counterparts.